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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,040	11/29/2000	Toshikatsu Furunaga	Q62004	8611

7590 07/26/2005

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

NUTTER, NATHAN M

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,040

Applicant(s)

FURUNAGA ET AL.

Examiner

Umakant K. Rajguru

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20,22-26,29 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20, 22-26, 29 & 31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. An RCE with amended claims has been filed on March 30, 2005.
2. Claims now under examination are 20, 22-26, 29 & 31-34.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 20, 24-26, 29 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auhorn et al (US 4908240) in view of Yoshimura et al (US 6171381).

Auhorn et al discloses an aqueous coating agent for paper consisting of (a) pigment, (b) a cationic aqueous polymer dispersion and (c) a surfactant (abstract). water-soluble polysaccharides are used in admixture with cationic polymer by (replacing a part of that cationic polymer) (col. 7, lines 23-29). Cationic polymers are described in col. 2, line 46 to col. 5 line 7 and they read on those of instant claims 24-26. Suitable surfactants are described in col. 7, line 30 to col. 8, line 22. they read on those of instant claims 27-30. Claimed ratios of cationic polymer to polysaccharide (of instant claims 31 and 32) are disclosed in col. 7 lines 23-26. Furthermore the claimed ratios of surfactant to polysaccharide (of instant claims 33 and 34) can be calculated from teachings in col. 2, lines 4-10 and in col. 7, line 23-24.

Instant claims are directed to a method for sizing a ^{paper}proper. Only step in the method is applying a coating on or impregnating a raw paper. This step is quit known in the art and is always associated with a any material to be used as a sizing agent.

Yashimura describes on aqueous metallic ink composition comprising a metallic powder pigment, a colorant, water, a water-soluble organic solvent, a natural polysaccharide and a water=soluble soy polysaccharide or/water-soluble

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polysaccharide derivative (col. 1, lines 3-10). Patentee discloses in col. 2, lines 23-27, that the polysaccharide functions as a coating or size for a substrate such as paper. Preparation of polysaccharide is described in col. 6, lines 60 to col. 7, line 59 and the available polysaccharides disclosed in col. 7 lines 40-42 are mentioned in instant specification surfactant is mentioned in col. 11, line 66.

It is true that Yoshimura uses soy polysaccharide together with natural polysaccharide and that they can be used as a binder. It is the examiner's position that instant claims do not preclude inclusion of natural polysaccharide unless it is established that these other moieties adversely affect the basic & novel characteristics of claimed invention. Additionally Auhorn, the primary reference, uses polysaccharide (with cationic polymer) as a binder.

Yashimura is relied upon for its disclosure of the soy polysaccharide or soy polysaccharide derivative in a coating composition such as an ink composition (see col. 3, lines 46-61).

Therefore it would have been obvious to use in the coating agent of Auhorn, the soy polysaccharide (of Yoshimura), order to enhance the stability of coating of Auhorn with respect to viscosity.

Though the prior art does not explicitly mention the limitation (in instant claim 1) of quick penetration of applied ink and suppression of applied ink and suppression of spreading of ink dots, it is reasonable to assume that the sizing agent of prior art, which reads on the instantly claimed one with respect to properties and propositions, automatically satisfies this limitation unless provide otherwise.


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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to U. K. Rajguru whose telephone number is (571) 272-1077. The examiner can normally be reached on Monday-Friday from 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

U. K. Rajguru
July 1, 2005


James J. Seidleck
Supervisory Patent Examiner
Technology Center 1711